

Amendment to the Claims:

The claims under examination in this application, including their current status and changes made in this paper, are respectfully presented.

1 (currently amended). A method of color matching images generated by multiple projectors of a tiled projection display system, comprising the steps of:

providing at least two projectors, each having chromaticity data representing a color gamut of that projector stored therein, and having luminance data representing the relative luminance of colors generated by that projector stored therein;

communicating each projector's stored chromaticity and luminance data to a main controller;

determining a standard color gamut achievable by each said projector;

calculating color correction data for each projector, based on that projector's chromaticity data, luminance data, and on said standard color gamut; and

calculating image pixel values based on input image data and said color correction data.

Claims 2 and 3 are canceled.

4 (currently amended). The method of Claim 3 1, wherein each of said projectors include spatial light modulators at which light is directed from a light source through a rotating color wheel;

and wherein said ~~storing~~ stored luminance data for a projector represents effective light times of each color of a the color wheel ~~used by said~~ for that projector relative to a base color wheel rate.

5 (currently amended). The method of Claim 1, ~~further comprising the step of storing additional data representing the luminance of a light source of each projector, and further comprising the step of adjusting the gain of the color correction data based on the additional~~ luminance data.

6 (previously presented). The method of Claim 1, comprising communicating each projector's chromaticity data in the form of a transfer function matrix.

7 (previously presented). The method of Claim 1, comprising calculating said chromaticity data from primary and white color values.

8 (previously presented). The method of Claim 1, said determining and calculating color correction data steps performed by at least one component selected from the group consisting of:
a processing system in data communication with each projector, and
at least one projector functioning at least partially as the main controller.

9 (previously presented). The method of Claim 1, said determining and calculating color correction data steps are performed by one of said projectors.

10 (previously presented). The method of Claim 1, comprising generating images using a spatial light modulator.

11 (previously presented). The method of Claim 1, comprising calculating said color correction data from primary and secondary colors.

12 (currently amended). A display system comprising:
at least two projectors, each said projector operable to generate a portion of an image,
each projector comprising; and
a spatial light modulator, for generating its portion of the image responsive to pixel values for each of a plurality of color components;

a memory, for storing chromaticity data stored in each and luminance data for that projector, the luminance data representing the relative luminance of the colors generated by the spatial light modulator responsive to the pixel values; and

wherein at least one of said at least two projectors is operable to deliver the chromaticity data to a main controller, coupled to each of the at least two projectors to receive the stored chromaticity and luminance data therefrom and to communicate corrected pixel values thereto, the main controller comprising circuitry for generating color correction data from said main controller for each projector based on the received chromaticity and luminance data, and to calculate for calculating corrected pixel values based on said color correction data.

13 (currently amended). The display system of Claim 12, wherein the spatial light modulator in at least one of said at least two projectors comprising comprises:

a digital micro mirror device;

a light source; and

a color wheel disposed between the light source and the digital micro-mirror device.

Claims 14 and 15 are canceled.

16 (currently amended). The display system of Claim 13, wherein the relative luminance data of each of the projectors represents effective light times of said at least one projector of said at least two projectors colors of the color wheel in that projector relative to a base color wheel rate.

Claim 17 is canceled.

18 (previously presented). The display system of Claim 12, wherein the color correction data is derived from primary and secondary colors.

Claims 19 through 23 are canceled.